

To Whom It May Concern:

As consumers we take it for granted that more choices are better. For Power Line Communications the additional choice, whose ultimate value to consumers has not been demonstrated, could come at the great price of impacting the Amateur Radio Service's ability to communicate under weak signal conditions on the High Frequency amateur bands. Japan, a country with both a substantial population of amateur radio operators, a country strong in communications technology with outstanding technical capability, has chosen not to allow the deployment of PLC at this time because the broadband noise generated by the service would severely impact the ability of amateurs to communicate on the HF bands.

I propose for consideration three criteria for assessing the importance of PLC and the potential impact on the Amateur Radio community:

1) Need

There is no capability provided by PLC that cannot be obtained with alternate technologies today. One-way and even two-way satellite Internet service is now nearly universal in the US. Remote communities are adopting "community internet service" based on low power short range two way transceivers concentrated by high bandwidth routers using existing telephone infrastructure. DSL service is only now beginning to grow to substantial numbers and the various cable based internet services are now the leading providers on high-speed internet access. Add to this the eventual migration to 3G phones which will be able to provide mobile high speed internet access across the entire US.

At what point do we decide we have allocated enough spectrum to these sometimes redundant services? I suggest we are at that point now. We have ample communications technology to support several different alternative internet access methods for every consumer in the US. We are now at the point of potentially sacrificing a valuable, self-funded communications entity, the Amateur Radio Service, by rationalizing "more is better". Are the economics of Power Line Communications ("the infrastructure is already there") really better than DSL ("the infrastructure is already there") or cable ("the infrastructure is already there")? The answer is no. PLC will be neither different nor better. The average consumer won't be able to tell the difference between the services. It will just be another alternative and one that potentially comes at a very high cost to both the Amateur Radio Service, the Military Affiliate Radio Service (MARS) and Homeland Security in general.

2) Cost

How many amateur radio operators, on a state by state and community by community basis, are needed to maintain a viable backup communications infrastructure in the US? Remember that radio amateur typically self funds thousands of dollars for HF/VHF radio equipment and antennas, provide their own transportation, pays for their own licensing and training, and donates his/her time, gratis to their country when called upon.

I can't speak for all hams but I can describe why I enjoy amateur radio. I love weak signal HF radio. It is my passion. I delight in training for extremely difficult conditions where I can send and receive messages over long distances using very low emergency power levels. I have approximately invested \$4000 in HF radio equipment in my home and car. If PLC impacted my ability to enjoy my passion I would sell my equipment and leave the Amateur Service. Ham radio is my avocation and if it's not fun I will have little motivation to continue.

While I enjoy the privilege of communicating using HF technology, I have clearly paid a significant price to do so. I am probably not the only person who would follow a similar course of action. When PLC is authorized for a community, what level of attrition of local amateur radio operators will be deemed acceptable? What will be the impact to the civil emergency capability in each community? What level of loss will the Military Affiliate Radio Stations (MARS) system tolerate?

Finally, what is the FCC's plan, on a community by community basis, to fund and replace the lost emergency communications infrastructure? If half the licensed amateur radio operators in the country (approximately 350,000 people) have invested even \$2000 in HF radio equipment and antennas, the potential HF infrastructure liability for equipment alone is over \$700 Million dollars, even ignoring additional funding for salaries, transportation and benefits.

In the end, is it worth the potential price on a national level to provide yet another consumer choice for high speed internet access with no demonstrated differentiation or added value?

3) Charter and Direction

The FCC's actions regarding the Amateur Radio Service are recently inconsistent. It is clear that the FCC recognizes and values the emergency communications capabilities that amateur radio operators provide. Amateur radio operators cheered when we were given a small 60 meter allocation for emergency communications, even with strong restrictions on band size, power, and antenna gain. Now we find that our recently granted HF emergency communications capability may be unusable due to unlicensed interference in communities that have PLC. It can't be both ways. One choice must be right and the other wrong. The FCC needs to decide which is more important to the country: the continued, unfettered operation of the amateur radio service or yet another alternative to high speed internet access.

The FCC also needs to decide if the Military Affiliate Radio Station service is more important to the country than yet another alternative form of high speed internet access.

Finally the FCC needs to decide the relative importance of the Amateur Service in ensuring Homeland Security. There is no comparable, distributed HF communications infrastructure existing in the US to replace Amateur Radio in the event of a national emergency.

In summary, PLC poses a threat to the continued successful operation of the Amateur Service. Powerlines are nothing more than large antennas at HF. These multi-wavelength antennas will in total radiate large amounts of RF energy that will interfere and/or mask weak signal communication in the licensed Amateur Service. PLC has not been demonstrated to provide a capability that cannot be provided by other, non-interfering means. Because HF communications can be difficult due to solar weather, additional interference could further degrade amateur operators abilities to deliver communications in an emergency. The additional interference provided by PLC could force many amateurs to abandon the amateur service altogether. The loss of unknown numbers of amateur radio operators will impact both local emergency communication infrastructure and the national infrastructure including MARS service and Homeland Security in general. Because amateur operators are unpaid and fund their own equipment, the government could be forced to fund a new entity to replace the Amateur Service.

I ask that the FCC follow in the footsteps of the government of Japan in not allowing any PLC deployment that could even potentially interfere with HF operation in the Amateur Radio Service. A valuable national asset, the Amateur Radio Service, will be put at risk if PLC communications technology is deployed nationally.